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研究課題名 (和文) 「LOV 光受容体による植物の運動制御機構」総括班

研究課題名 (英文) Regulation of plant movement by LOV photoreceptors

研究代表者

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研究成果の概要 (和文) :

研究目的に従って、年 2 回の班会議、2 年に 1 回の若手ワークショップ、国際会議の開催と国際研究集会における発表を行った。国内では毎年、関連分野の研究者を招いてシンポジウムを開催した、共同研究を促し、多くの論文を発表した。特にフォトトロピン関連の論文は研究期間内に世界で公表された論文 185 報のうち 61 報に達した。LOV 光受容体の分野で、内容的にも数の上でも世界をリードした。

研究成果の概要 (英文) :

We held the meetings for this project twice a year, and workshops by young scientists. We held and attended the international conferences. We stimulated the collaborations and achieved the numerous publications. The portion of our publications on phototropin signaling reached one third of the publications in the world. Our project led the studying of LOV photoreceptors in the world..

交付決定額

(金額単位 : 円)

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2005 年度	2,900,000	0	2,900,000
2006 年度	2,900,000	0	2,900,000
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研究分野 : 生物学

科研費の分科・細目 : 基礎生物学 ・ 植物分子生物 , 生理学 (5703)

キーワード : LOV 光受容体、青色光反応、フォトトロピン、環境応答

1 . 研究開始当初の背景

LOV 光受容体に関する研究に関して、特にフォトトロピンの関与する応答反応において、我が国は世界をリードする位置に立っており、複数のフォトトロピン依存の生理応答の研究において世界の追随を許さない状態である。また、我が国にはフォトトロピンの初期過程から下流の応答までの研究者がそろっている。

2 . 研究の目的

本研究は 特定領域『LOV 光受容体による植物の運動制御機構』研究計画を滞り無く進展させ、全体の研究計画を策定し、各班員の研究情報を交換し、また、海外研究者とも情報交換を行い各班員相互の研究の向上を図ることを目的とする。

3 . 研究の方法

1) 年 2 回の班会議を開催し成果の公表と評

- 価を行い、次のステップへの研究を議論し、指針とする。
- 2) 各計画班の研究手法や成果の交流に基づいて、共同研究を行う。
 - 3) 若手の会議を開催し、若手間の交流を促進し次世代を育成する。
 - 4) 国内・外で研究集会を開催し、情報の交換と成果の公表を行う。

4. 研究成果

- 1) 植物生理学会において、毎年、シンポジウムを開催し、領域内の成果の公表を行うとともに関連研究者を招待し、研究交流を行った。
- 2) 国内で研究集会を開催するとともに、研究成果の発表を行った。
- 3) 若手研究者のワークショップを開催した。
- 4) 領域内における多くの共同研究を実施した。

5. 主な発表論文等

(研究代表者、研究分担者及び連携研究者には下線)

[雑誌論文](計74件)

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